

Before the  
Federal Communications Commission  
Washington, D.C. 20554

In the matter of )  
 )  
RC TECHNOLOGIES CORPORATION )  
 )  
Request for Waiver of Broadband Radio Service )  
and Educational Broadband Service Technical )  
Rules )  
 )

**MEMORANDUM OPINION AND ORDER**

**Adopted: January 7, 2010**

**Released: January 8, 2010**

By the Chief, Broadband Division, Wireless Telecommunications Bureau:

**I. INTRODUCTION**

1. The Broadband Division (Division) of the Wireless Telecommunications Bureau (WTB or Bureau) has before it a request by RC Technologies Corporation (RCT), seeking a waiver of Sections 27.53(m), 27.1221, and 27.1222 of the Commission’s Rules<sup>1</sup> for itself and all of its Educational Broadband Service (EBS) licensees/lessors in the Geographic Service Areas (GSAs) of Sisseton,<sup>2</sup> and Kranzburg, South Dakota.<sup>3</sup> For the reasons stated below, we grant RCT’s 2009 Waiver Request, subject to conditions designed to minimize harm to neighboring licensees and to ensure that the relevant stations are transitioned to the new band plan.

<sup>1</sup> RC Technologies Corporation, Request for Waiver of Commission Rules Regarding Transition of Broadband Service and Educational Broadband Service Stations (filed Aug. 27, 2009) (2009 Waiver Request). As explained in further detail below, the 2009 Request supersedes an earlier request filed by RCT to opt out of the transition to the new BRS/EBS band plan filed by RCT on April 27, 2007. Request for Waiver (filed Apr. 27, 2007) (2007 Waiver Request). We will dismiss the 2007 Waiver Request as moot to the extent our action on the 2009 Waiver Request does not constitute action on the 2007 Waiver Request.

<sup>2</sup> In Sisseton, RCT’s two EBS licensees/lessors are Station WNC879 (Channels B1-B4/Sisseton School District) and Station WNC878 (Channels D1-D4/Veblen School District). RCT has a Special Temporary Authority (STA) to operate on EBS Channels A1-A4 and G1-G4. RCT is the licensee for Station WQDZ549 (Commercial EBS Channels C1-C4), Station WLK365 (Channels E1-E4), Station WLK366 (Channels F1-F4), and Station WNTK289 (Channels H1-H3). 2007 Waiver Request, Appendix B.

<sup>3</sup> In Kranzburg, RCT’s three EBS licensees/lessors are Station WNC960 (Channels B1-B4/Deuel School District No. 19-4), Station WNC959 (Channels D1-D4/Waverly School District No. 14-5), and Station WNC826 (Channels G1-G4/ Summit School District No. 54-6). RCT has an STA to operate on EBS Channels C1-C4 and a pending request for an STA to operate on Channels A1-A4. RCT is the licensee of Station WLK330 (Channels E1-E4), Station WLK327 (Channels F1-F4), and Station WNTK288 (Channel H1). 2007 Waiver Request, Appendix B.

## II. BACKGROUND

2. On July 29, 2004, the Commission released a *Report and Order and Further Notice of Proposed Rulemaking* that transformed the rules and policies governing the licensing of services in the 2500-2690 MHz band.<sup>4</sup> Prior to the *BRS/EBS R&O*, the technical rules and band plan for the 2500-2690 MHz band were designed primarily to promote wireless cable and educational television services, which resulted in licensees receiving interleaved channel groups instead of contiguous channel blocks.<sup>5</sup> In most areas of the country, however, the deployment of wireless cable was not successful.

3. Consequently, in the *BRS/EBS R&O*, the Commission developed a new band plan and technical rules that permit a range of new and innovative wireless services in the 2500-2690 MHz band and give licensees contiguous channel blocks.<sup>6</sup> The new band plan consists of two low-power segments, the Lower Band Segment (LBS) and the Upper Band Segment (UBS), and a high-power segment, the Middle Band Segment (MBS).<sup>7</sup> The channel configuration and the technical rules for the LBS and UBS are designed to permit a range of wireless services.<sup>8</sup> The MBS, in contrast, consists of seven high-power channels and is designed for the transmission of video programming, for those licensees that still wish to provide such programming.<sup>9</sup> The *BRS/EBS R&O* further established a plan to transition EBS and BRS licensees from their interleaved channel locations to their new channel locations in the LBS, UBS, or MBS.<sup>10</sup> Not all licensees, however, are required to transition to the new band plan and technical rules. The *BRS/EBS R&O* permitted a limited number of Multichannel Video Programming Distributors (MVPDs) to seek a waiver from the Commission to “opt-out” of the transition, thus permitting them to continue high-power, high-site operations throughout the entire 2500-2690 MHz band.<sup>11</sup> On April 27, 2006, the Commission released the *Third Memorandum Opinion and Order and Second Report and Order (3rd MO&O)*, in which it affirmed its decision to consider these waivers on a case-by-case basis.<sup>12</sup>

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<sup>4</sup> See Amendment of Parts 1, 21, 73, 74 and 101 of the Commission’s Rules to Facilitate the Provision of Fixed and Mobile Broadband Access, Educational and Other Advanced Services in the 2150-2162 and 2500-2690 MHz Bands, *Report and Order and Further Notice of Proposed Rulemaking*, WT Docket No. 03-66, 19 FCC Rcd 14165 (2004) (*BRS/EBS R&O* and *FNPRM* as appropriate).

<sup>5</sup> In the EBS and BRS services, channels are usually licensed in groups of four. When EBS was created, EBS reception equipment could not receive adjacent channels without interference. Thus, the Commission interleaved the A block channels with the B block channels, the C block channels with the D block channels, the E block channels with the F block channels and the G block channels with the H block channels. See Amendment of Parts 1, 21, 73, 74 and 101 of the Commission’s Rules to Facilitate the Provision of Fixed and Mobile Broadband Access, Educational and Other Advanced Services in the 2150-2162 and 2500-2690 MHz Bands, *Notice of Proposed Rulemaking and Memorandum Opinion and Order*, WT Docket No. 03-66, 18 FCC Rcd 6722, 6744 ¶ 47 (2003) (*NPRM*).

<sup>6</sup> See *BRS/EBS R&O*, 19 FCC Rcd at 14168 ¶ 4.

<sup>7</sup> *Id.* at 14169 ¶ 6.

<sup>8</sup> *Id.* at 14168 ¶ 4.

<sup>9</sup> *Id.* at 14185-14186 ¶ 4.

<sup>10</sup> *Id.* at 14197-14198 ¶ 72.

<sup>11</sup> *Id.* at 14199-14200 ¶ 77.

<sup>12</sup> Amendment of Parts 1, 21, 73, 74 and 101 of the Commission’s Rules to Facilitate the Provision of Fixed and Mobile Broadband Access, Educational and Other Advanced Services in the 2150-2162 and 2500-2690 MHz Bands, *Third Memorandum Opinion and Order and Second Report and Order*, WT Docket No. 03-66, 21 FCC Rcd 5606,

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4. On May 31, 2006, after the rules establishing the new band plan and technical requirements for the 2.5 GHz band were effective, RCT purchased the Sisseton and Kranzburg GSAs from North East Television, Inc. (NETV), a subsidiary of a rural telecommunications cooperative that had operated MVPD services in the Sisseton and Kranzburg GSAs since the early 1990s.<sup>13</sup> According to RCT, NETV initially established the systems in Sisseton and Kranzburg in the time before DBS services were launched to provide wireless cable MVPD services to rural consumers who did not have access to cable television.<sup>14</sup> Over time, DBS services proliferated, so NETV focused on other business opportunities and decided to sell the Sisseton and Kranzburg licenses to RCT.<sup>15</sup>

5. On acquiring the Sisseton and Kranzburg systems, RCT determined that there was pent-up demand for additional programming streams and other video services.<sup>16</sup> In the two years after acquiring the systems and before filing its 2007 Waiver Request, RCT spent considerable effort to design and construct the nation's first wireless MPEG-4 digital video system, a project that ultimately involved over 45 contractors, vendors from across the globe, numerous governmental and tribal approvals, construction of two new towers and fiber links, and substantial cost.<sup>17</sup> The costs of upgrading the systems exceeded \$6 million.<sup>18</sup> To cover these costs, RCT provided \$3 million of its own funding and applied for and received a low-interest loan from the Rural Utilities Service for \$3,382,143.<sup>19</sup>

6. RCT reported that initially the systems in Sisseton and Kranzburg would transmit on five pre-transition BRS and EBS channels.<sup>20</sup> By using MPEG-4 technology RCT could transmit up to 15 standard video programming streams on each 6-megahertz channel, for a total of 75-80 programming streams.<sup>21</sup> RCT argued it would have constructed its system to transmit MPEG-4 digital video services on substantially more BRS and EBS channels, which would yield as many as 150-200 distinct programming streams, including high-definition and video-on-demand television services, if it had not needed to seek a waiver of the transition rules.<sup>22</sup>

7. On April 27, 2007, RCT filed the 2007 Waiver Request asking to "opt-out" of the transition of the 2500-2690 MHz band in Sisseton, Kranzburg, and Willow Lake, South Dakota.<sup>23</sup> RCT

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5645 ¶ 72 (2006) (*BRS/EBS 3rd MO&O*). In the *3rd MO&O*, the Commission also granted WATCH TV's request to opt-out of the transition of the 2.5 GHz band in Lima, Ohio. *Id.* at ¶ 84.

<sup>13</sup> 2007 Waiver Request at 2. *See also* File Nos. 0002639461, 0002639466 (filed Jun. 5, 2006).

<sup>14</sup> *Id.*

<sup>15</sup> *Id.* at 2-3. RCT was formed in 1995 and is a wholly-owned subsidiary of Roberts County Telephone Cooperative Association, a cooperative that provides local exchange and DSL service to two areas of northeastern South Dakota and southeastern North Dakota. *Id.* at 2.

<sup>16</sup> *Id.* at 4.

<sup>17</sup> *Id.* at iii.

<sup>18</sup> *Id.*

<sup>19</sup> *Id.* at iii, 8.

<sup>20</sup> *Id.* at iii. The channels were D3, D4, E1, E2, and F1. *Id.* Those channels were chosen because they correspond to the available post-transition MBS channels B4, D4, E4, F4, and G4. *Id.*

<sup>21</sup> *Id.* at iii-iv.

<sup>22</sup> *Id.* at iv.

<sup>23</sup> 2007 Waiver Request at 1.

requested waiver of the following rules, among others: Sections 27.53(m), 27.1221, and 27.1222 of the Commission's Rules.<sup>24</sup> RCT also filed a letter of support from Northern Wireless Communications (Northern Wireless), which operates a neighboring system in Bath, South Dakota.<sup>25</sup>

8. Four of RCT's neighbors, Data Truck, L.L.C. (Data Truck),<sup>26</sup> Sioux Valley Rural Television, Inc. d/b/a Sioux Valley Wireless (Sioux Valley),<sup>27</sup> Clearwire Corporation (Clearwire),<sup>28</sup> and Santel Communications Cooperative (Santel),<sup>29</sup> opposed the 2007 Waiver Request. The National Telecommunications Cooperative Association (NTCA) filed comments in support of RCT's waiver request.<sup>30</sup> Clearwire, Sprint Nextel Corporation (Sprint Nextel), Xanadoo, LLC (Xanadoo), and NextWave Wireless, Inc. (NextWave)<sup>31</sup> filed comments (Joint Comments) largely opposing the eleven opt-out waiver requests on which the Bureau had sought comment.<sup>32</sup> The National ITFS Association

<sup>24</sup> *Id.* at 19-20.

<sup>25</sup> *Id.* at Attachment I (Letter from Jim Moore, General Manager/CEO, Northern Wireless Communications to Pamela J. Harrington, General Manager, RC Technologies Corporation (Apr. 3, 2007).

<sup>26</sup> Data Truck is the authorization holder for BTA B464 (Watertown, SD) and uses BRS Channels 1, 2A, and H2 to provide fixed wireless broadband services. Opposition, Data Truck, LLC (filed Jun. 25, 2007) (Data Truck Opposition) at 2.

<sup>27</sup> Sioux Valley is the authorization holder for BTA B422 (Sioux Falls, SD). Opposition, Sioux Valley Rural Television, Inc. d/b/a Sioux Valley Wireless (filed Jun. 25, 2007) (Sioux Valley Opposition) at 2.

<sup>28</sup> Clearwire is the lessee of BTAs B138 (Fargo, ND), B142 (Fergus Falls, MN), and B477 (Willmar, MN) and authorization holder of B391 (St. Cloud, MN). Opposition to and Comments on Request for Waiver, Clearwire Corporation (filed Jun. 25, 2007) (Clearwire Opposition). *See also* 2007 Waiver Request Supplement, Appendix A at 6.

<sup>29</sup> Santel is the authorization holder for BTAs B199 (Huron, SD as partitioned) and B301 (Mitchell, SD), and site-based BRS and Commercial EBS Stations WG419, WMX689, and WMX690, all within the Mitchell BTA. *Ex Parte* Comments of Santel Communications (filed Sep. 21, 2007) (Santel *Ex Parte* comments) at 2.

<sup>30</sup> Comments of the National Telecommunications Cooperative Association (NTCA) (filed on Jun. 25, 2007).

<sup>31</sup> Letter from Terri B. Natoli, Clearwire Corporation, Trey Hanbury, Sprint Nextel Corporation, Cheryl Crate, Xanadoo, LLC, and Jennifer M. McCarthy, NextWave Wireless, Inc. to Marlene H. Dortch, Federal Communications Commission (dated Jun. 25, 2007) (Joint Commenters' Letter).

<sup>32</sup> On June 25, 2007, the Commission had pending before it opt-out waiver requests from RCT; Central Texas Communications, Inc.; C&W Enterprises, Inc.; Northwest Communications Cooperative; Choice Communications LLC; CNI Wireless, Inc.; Dakota Central Telecommunications Cooperative *et al.*; Evertek, Inc.; Northern Wireless Communications Inc.; RC Technologies Corporation; Starcom, Inc.; and United Telephone Mutual Aid Corporation. Wireless Telecommunications Bureau Seeks Comment on Request by RC Technologies Corporation for Waiver of the Requirement to Transition to the New BRS/EBS Band Plan, *Public Notice*, 22 FCC Rcd 9364 (WTB BD 2007); Wireless Telecommunications Bureau Seeks Comment on Request by Central Texas Communications, Inc. for Waiver of the Requirement to Transition to the New BRS/EBS Band Plan, *Public Notice*, 22 FCC Rcd 9414 (WTB BD 2007); Wireless Telecommunications Bureau Seeks Comment on Request by C&W Enterprises, Inc. for Waiver of the Requirement to Transition to the New BRS/EBS Band Plan, *Public Notice*, 22 FCC Rcd 9410 (WTB BD 2007); Wireless Telecommunications Bureau Seeks Comment on Request by Northwest Communications Cooperative for Waiver of the Requirement to Transition to the New BRS/EBS Band Plan, *Public Notice*, 22 FCC Rcd 9378 (WTB BD 2007); Wireless Telecommunications Bureau Seeks Comment on Request by Choice Communications LLC for Waiver of the Requirement to Transition to the New BRS/EBS Band Plan, *Public Notice*, 22 FCC Rcd 9357 (WTB BD 2007); Wireless Telecommunications Bureau Seeks Comment on Request by CNI Wireless, Inc. for Waiver of the Requirement to Transition to the New BRS/EBS Band Plan, *Public Notice*, 22 FCC Rcd 9368 (WTB BD 2007); Wireless Telecommunications Bureau Seeks Comment on Request by Dakota Central Telecommunications Cooperative *et al.* for Waiver of the Requirement to Transition to the New BRS/EBS Band Plan, *Public Notice*, 22 FCC Rcd 9371 (WTB BD 2007); Wireless Telecommunications Bureau Seeks Comment on  
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(NIA) and the Catholic Television Network (CTN) filed reply comments supporting the Joint Commenters.<sup>33</sup>

9. After comments were filed on the 2007 Waiver Request, RCT negotiated with its neighbors in an attempt to eliminate objections to its proposed operations. On July 29, 2008, RCT filed an amendment to the 2007 Waiver Request.<sup>34</sup> RCT and Data Truck proposed a plan under which they would operate under the post-transition band plan, exchange spectrum rights, and allow RCT to operate video and broadband systems at Sisseton and Kranzburg, South Dakota while also allowing Data Truck to operate an existing broadband system near Watertown, South Dakota and offer low power WiMAX service in the future.<sup>35</sup> In addition, Sioux Valley, which had previously opposed the 2007 Waiver Request, consented to grant of the waiver request described in the 2008 Amendment.<sup>36</sup>

10. On August 27, 2009, RCT filed the 2009 Waiver Request.<sup>37</sup> RCT now wishes to operate from the Sisseton site<sup>38</sup> with 29.0 dbw EIRP with an omnidirectional antenna and an antenna radiation center 150.5 meters above average terrain.<sup>39</sup> At the Kranzburg site,<sup>40</sup> RCT wishes to operate with 23.0 dbw EIRP with an omnidirectional antenna and an antenna radiation center 455 feet above average terrain.<sup>41</sup> The 2009 Waiver Request proposed spectrum sharing between RCT and Data Truck pursuant to the band plan in the 2008 Amendment.<sup>42</sup>

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Request by Evertek, Inc. for Waiver of the Requirement to Transition to the New BRS/EBS Band Plan, *Public Notice*, 22 FCC Rcd 9361 (WTB BD 2007); Wireless Telecommunications Bureau Seeks Comment on Request by Northern Wireless Communications Inc. for Waiver of the Requirement to Transition to the New BRS/EBS Band Plan, *Public Notice*, 22 FCC Rcd 9394 (WTB BD 2007); Wireless Telecommunications Bureau Seeks Comment on Request by Starcom, Inc. for Waiver of the Requirement to Transition to the New BRS/EBS Band Plan, *Public Notice*, 22 FCC Rcd 9401 (WTB BD 2007); Wireless Telecommunications Bureau Seeks Comment on Request by United Telephone Mutual Aid Corporation for Waiver of the Requirement to Transition to the New BRS/EBS Band Plan, *Public Notice*, 22 FCC Rcd 9404 (WTB BD 2007).

<sup>33</sup> Letter from Todd D. Gray, National ITFS Association and Edwin N. Lavergne, Catholic Television Network to Marlene H. Dortch, Federal Communications Commission (dated Jul. 10, 2007) (NIA/CTN Comments).

<sup>34</sup> RC Technologies, Amendment to Waiver Request (filed Jul. 29, 2008) (2008 Amendment).

<sup>35</sup> *Id.*

<sup>36</sup> *Id.* at Exhibit C (Letter from Joel Brick, Technical Director, Sioux Valley Wireless to Pamela J. Harrington, CEO and General Manager, RC Technologies Corporation).

<sup>37</sup> 2009 Waiver Request.

<sup>38</sup> The coordinates of the Sisseton site are 44°-40'-00.0" North, 97°-10'-08.4" West.

<sup>39</sup> *Id.* at Exhibit B.

<sup>40</sup> The coordinates of the Kranzburg site are 44°-55'-53.5" North, 96°-53'-28.6" West.

<sup>41</sup> *Id.*

<sup>42</sup> *Id.* at Exhibit A. Under the proposed arrangement, in the Kranzburg-Watertown area, RCT would operate in the bands 2518.5-2535 MHz (Channels B1-B3), 2551.5-2568 MHz (Channels D1-D3), and 2618-2660 MHz (Channels BRS-2, E1-E3, F1-F3, and the lower 3 megahertz of Channel H1) under the pre-transition technical rules. The upper 2.5 megahertz of Channel H1 would serve as a guard band between RCT and Data Truck. RCT would operate in the 2590-2614 MHz portion of the MBS (Channels D4, G4, F4, and E4) pursuant to the technical rules applicable to the MBS. Data Truck would operate on Channel BRS-1 (2150-2156/2496-2502 MHz) and in the frequency range 2662.5-2690 MHz (Channels H2-H3 and G1-G3) pursuant to the post-transition technical rules. Data Truck would also operate on Channel B4 (2578-2584 MHz) pursuant to the MBS technical rules. With respect

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11. RCT now seeks waiver of the Sections 27.53(m), 27.1221, and 27.1222 of the Commission's Rules.<sup>43</sup> With respect to Section 27.53(m) of the Commission's Rules, RCT wishes to continue operating in the LBS and UBS under the pre-transition emission limits for digital video programming channels.<sup>44</sup> With respect to Section 27.1222 of the Commission's Rules, RCT asks that it and its lessors be allowed to operate in the 2568-2572 MHz and 2614-2618 MHz bands on a primary basis without the need to obtain consent from other BRS and EBS licensees.<sup>45</sup>

12. With respect to Section 27.1221 of the Commission's Rules, RCT seeks a waiver of the height benchmarking obligations set forth in that rule.<sup>46</sup> RCT now has consents from Northern Wireless Communications,<sup>47</sup> Data Truck,<sup>48</sup> Sioux Valley,<sup>49</sup> and Santel.<sup>50</sup> RCT provides maps showing where its transmitters could have line of sight and exceed the -107 dBm/5.5 megahertz signal at the receiver of a hypothetical co-channel base station.<sup>51</sup> With respect to the Kranzburg site, those areas outside the GSAs of RCT or its lessors are licensed to Data Truck, Sioux Valley, or Santel, which have consented to RCT's proposed operations.<sup>52</sup> With respect to the Sisseton site, the relevant areas to the west or south of RCT's and its lessors' GSAs that could require a waiver are licensed to RCT, Data Truck, or Northern Wireless.<sup>53</sup> To the east and north of Sisseton, RCT requests a waiver of Section 27.1221 of the Commission's Rules. A waiver of Section 27.1221 is necessary, RCT argues, because even if the antenna at the Sisseton site were at ground level, it could not comply with Section 27.1221's height benchmarking obligations.<sup>54</sup> Second, RCT contends that the areas in question are very small rural areas of southern North Dakota and western Minnesota and that there would only be "slight" impact on the ability of consumers to receive service from other operators.<sup>55</sup> RCT argues that it is not practical to relocate the

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to the Sisseton, South Dakota area, under the proposed arrangement, RCT would operate in the bands 2518.5-2568 MHz (Channels B1-B3, C1-C3, and D1-D3) and 2618-2673.5 MHz (Channels BRS-2, E1-E3, F1-F3, and H1-H3) under pre-transition technical rules, and in the 2578-2596 MHz (Channels B4, C4, and D4) and 2602-2614 MHz bands (Channels F4 and E4) pursuant to the MBS technical rules. Data Truck would operate on Channel BRS-1 (2150-2156/2496-2502 MHz). *Id.*

<sup>43</sup> *Id.* at 4-6.

<sup>44</sup> *Id.* at 4.

<sup>45</sup> *Id.*

<sup>46</sup> *Id.*

<sup>47</sup> 2007 Waiver Request at Appendix I (Letter from Jim Moore, General Manager/CEO, Northern Wireless Communications to Pamela Harrington, General Manager, RC Technologies Corporation (dated Apr. 3, 2007).

<sup>48</sup> 2009 Waiver Request at Exhibit C (Letter from Lywellen Tollefson, President, Data Truck, LLC to Pamela Harrington, CEO and General Manager, RC Technologies Corporation (dated Aug. 18, 2009).

<sup>49</sup> *Id.* at Exhibit C (Letter from Joel Brick, Technical Director, Sioux Valley Wireless to Pamela Harrington, CEO and General Manager, RC Technologies Corporation (dated Aug. 20, 2009).

<sup>50</sup> *Id.* at Exhibit C (Letter from Ryan Thompson, General Manager, Santel Communications Cooperative, Inc. to Pamela Harrington, CEO and General Manager, RC Technologies Corporation (dated Aug. 26, 2009).

<sup>51</sup> 2009 Waiver Request at Exhibit D.

<sup>52</sup> *Id.* at 5.

<sup>53</sup> *Id.*

<sup>54</sup> *Id.* See also *Id.* at Exhibit E.

<sup>55</sup> *Id.* at 6.

Sisseton transmitter because of the time and expense involved in obtaining a new site, obtaining approvals, and reinstalling customer premises equipment.<sup>56</sup> RCT also argues that relocating the tower could cause interference to nearby BRS and EBS stations and could result in loss of service because the ridge on which it is currently located would act as a barrier to service.<sup>57</sup> Finally, RCT argues that a waiver would be consistent with the Bureau's treatment of Dakota Central Telecommunications Cooperative.<sup>58</sup>

13. Although the 2009 Waiver Request was served on the parties that had filed comments on the 2007 Waiver Request, no comments or oppositions were filed in response to the 2009 Waiver Request.

### III. DISCUSSION

14. The Commission's rules state that waivers will be granted if it is shown that: (i) the underlying purpose of the rule(s) would not be served or would be frustrated by application to the instant case, and that a grant of the requested waiver would be in the public interest; or (ii) in view of the unique or unusual factual circumstances of the instant case, application of the rule(s) would be inequitable, unduly burdensome or contrary to the public interest, or the applicant has no reasonable alternative.<sup>59</sup> In this case, we conclude that RCT has justified its 2009 Waiver Request. Specifically, we conclude that granting RCT waiver of the technical rules for which it requests waivers would facilitate the provision of advanced video and broadband services, allow more efficient utilization of spectrum, promote the transition to the new BRS/EBS band plan, and maximize the benefits that would result from the agreements that RCT and its neighbors have entered into.

15. RCT seeks a waiver to substantially increase the programming streams in its Sisseton and Kranzburg systems, which it acquired on May 31, 2006.<sup>60</sup> If its 2009 Waiver Request is granted, RCT would use its new digital wireless MPEG-4 multichannel video programming distribution system to provide 150-200 distinct programming streams and add high-definition, video-on-demand, and other advanced wireless services to its service offerings.<sup>61</sup>

16. With respect to its request for waiver of Section 27.53(m) of the Commission's Rules, which establishes out-of-band emission limits, we find that RCT has no reasonable alternative to obtaining a waiver if it wishes to provide advanced video services within its service area. Furthermore, RCT has worked out an agreement with Data Truck, the only other entity that has expressed interest in providing service within RCT's GSAs, to divide the available frequencies, and Data Truck consents to RCT's operations. We therefore conclude that a waiver would provide clear benefits to RCT without harming any plans for providing service on adjacent channels.

17. We also grant RCT a waiver of Section 27.1222 of the Commission's Rules to allow it to operate in the 2572-2576 MHz and 2614-2618 MHz bands on a primary basis. These bands were

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<sup>56</sup> *Id.*

<sup>57</sup> *Id.*

<sup>58</sup> *Id.*, citing Dakota Central Telecommunications Cooperative, 24 FCC Rcd 4729, 4739 ¶ 20 (WTB 2009).

<sup>59</sup> 47 C.F.R. § 1.925(b)(3).

<sup>60</sup> 2007 Waiver Request at iii, 6.

<sup>61</sup> *Id.*

designed primarily to operate as a guard band between the MBS and the LBS/UBS.<sup>62</sup> In this case, a waiver could allow RCT to utilize additional spectrum and provide additional programming to its customers. Furthermore, Data Truck, the other licensee proposing to operate within the GSAs, consents to the proposed operation. We therefore conclude that strict application of the rule would not serve the underlying purpose of the rule and that a waiver would serve the public interest.<sup>63</sup>

18. With respect to Section 27.1221 of the Commission's Rules, the height benchmarking rule, the purpose of that rule is to prevent interference to neighboring base stations.<sup>64</sup> In this case, RCT has worked extensively with its neighbors to work out agreements to allow it and its neighbors to provide service without causing interference. Indeed, at the Kranzburg site, RCT does not need a waiver of Section 27.1221 of the Commission's Rules because it has consent from all the relevant neighbors. At the Sisseton site, we believe waiving Section 27.1221 of the Commission's Rules would have several public interest benefits. First, granting a waiver would allow RCT to transition to the new band plan. Those entities that opposed the 2007 Waiver Request argued the importance of having as many entities as possible transition to the new band plan. For example, Clearwire argued that the Commission "disfavored permitting licensees to opt out" of the transition.<sup>65</sup> By granting the 2009 Waiver Request, we would allow RCT and its neighbors to transition to the new band plan, thus providing the benefits of that new band plan to licensees and consumers. Another benefit of granting a waiver would be allowing RCT and its neighbors to operate consistent with their agreements. While the underlying purpose of Section 27.1221 is interference prevention, the agreements worked out between RCT and its neighbors are designed to provide interference protection while maximizing use of the spectrum. Without a waiver of Section 27.1221, RCT would be required to relocate its tower, which could cause interference to neighboring licensees. Granting a waiver of Section 27.1221 would also benefit the public by enabling RCT to fully provide innovative video services to its customers.

19. Clearwire, the only party currently opposing RCT with spectrum in the region, expressed concern in its 2007 Opposition that granting a waiver will "severely hinder" its ability to provide advanced wireless broadband services in the area and cause interference to its operations.<sup>66</sup> RCT's engineering showing demonstrates that, with respect to the Sisseton site, the only areas licensed to Clearwire where compliance with Section 27.1221 could be an issue are western Grant and Stevens counties in Minnesota, part of southern Richland County, North Dakota, and northeastern Sargent County, North Dakota.<sup>67</sup> Clearwire has offered no definitive indication of its desire to provide service in those areas, nor does it say when it would provide service in those areas. Furthermore, it is unclear whether Clearwire could place base stations in the affected area in compliance with its obligations under Section 27.1221. In contrast, granting RCT a waiver of Section 27.1221 of the Commission's Rules would allow both RCT and other neighboring licensees to fully implement agreements that could result in providing advanced video and broadband services in the region. On balance, the benefits to RCT,

<sup>62</sup> See *BRS/EBS R&O*, 19 FCC Rcd at 14185 ¶ 42.

<sup>63</sup> RCT and its lessors are not licensed to operate post-transition on certain subchannels in the J and K bands and have not requested such authorization. Our grant of a waiver does not constitute authority to operate in those subchannels for which RCT and its lessor do not hold a license.

<sup>64</sup> See *BRS/EBS R&O*, 19 FCC Rcd at 14213 ¶ 123.

<sup>65</sup> Clearwire Opposition at 3.

<sup>66</sup> *Id.* at 6-7.

<sup>67</sup> Compare Clearwire Opposition, Attachment 1 (Statement of George W. Harter) (maps showing Clearwire licensed spectrum) and 2009 Waiver Request at Exhibit D (map showing height benchmarking contour for E channel group).

neighboring licensees, and consumers of granting a waiver to RCT outweigh any additional burdens placed on Clearwire. We therefore waive Section 27.1221 of the Commission's Rules for RCT at the Sisseton site.

20. The waivers we grant herein are for the operations described in the 2009 Waiver Request. RCT may modify its operations, so long as such changes do not materially increase interference to neighboring licensees that have not consented to its modified operations.

21. We note that the center point for both the Kranzburg and Sisseton GSAs lie within the Watertown, SD BTA (BTA 464), which authorization is held by Data Truck.<sup>68</sup> We further note that under Section 27.1231(f) of the Commission's Rules, potential proponents were required to file Initiation Plans with the Commission on or before January 21, 2009 and that the Commission has not received an Initiation Plan to transition BTA 464.<sup>69</sup> We find that the pendency of RCT's waiver request may have discouraged potential proponents from transitioning the Watertown BTA. Therefore, also on our own motion and in order to facilitate the transition of the Watertown BTA to the new band plan, we waive Section 27.1231(f) and direct RCT to act as the proponent and file a transition initiation plan for the Watertown, South Dakota BTA (BTA 464) within thirty days from the release of this *Memorandum Opinion and Order*. If RCT works out an agreement with Data Truck or another eligible entity to act as the proponent for the Watertown BTA, such other entity may file as a proponent within that 30 day period.

22. Therefore, we grant RCT the following waivers for the operations as described in the 2009 Waiver Request:

- Any channel used for the transmission of digital video programming on RCT's system shall be permitted to continue operating under the "pre-transition" emission limits for digital video programming channels set forth in Section 27.53(m)(3);
- Section 27.1222 of the Commission's Rules (regarding the establishment of guardbands around the MBS) shall not be applicable to RCT and its EBS and BRS channel lessors; and
- RCT and its BRS and EBS channel lessors shall not be subject to the height benchmarking obligations set forth in Section 27.1221 at the Sisseton, South Dakota site.

These waivers are subject to the following conditions. First, within thirty days from the release of this *Memorandum Opinion and Order*, RCT, or such other eligible entity as may be agreed upon between RCT and that entity, shall act as the proponent and file a transition initiation plan for the Watertown, South Dakota BTA (BTA 464). Second, these waivers shall include any modifications to the operations described in the 2009 Waiver Request only if such modifications do not materially increase interference to neighboring licensees that have not consented to such modified operations. Third, our action herein does not constitute Commission approval of the

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<sup>68</sup> See 2007 Wavier Request at iv, 18.

<sup>69</sup> 47 C.F.R. § 27.1231(f). See WT Docket No. 06-136.

assignments, leases, and subleases described in the 2009 Waiver Request. Such approval must be obtained by the appropriate forms and obtaining prior Commission consent.<sup>70</sup>

#### IV. CONCLUSION AND ORDERING CLAUSES

23. The Division concludes that RCT has justified waiver of certain technical rules to allow it to fully operate an advanced video system. The waivers will also allow RCT and its neighbors to fully implement agreements that will allow them to provide advanced video and broadband services. Granting the waivers will also allow RCT and its neighbors to transition to the new BRS/EBS band plan.

24. ACCORDINGLY, IT IS ORDERED, pursuant to Section 4(i) of the Communications Act of 1934, 47 U.S.C. § 154(i), and Section 1.925 of the Commission's Rules, 47 C.F.R. § 1.925, that the Request for Waiver of Commissions Rules Regarding Transition of Broadband Radio Service and Educational Broadband Service Stations filed by RC Technologies Corporation on August 27, 2009 IS GRANTED to the extent indicated in Paragraph 22, *supra*, subject to the conditions noted in that paragraph.

25. IT IS FURTHER ORDERED, pursuant to Section 4(i) of the Communications Act of 1934, 47 U.S.C. § 154(i), and Section 1.925 of the Commission's Rules, 47 C.F.R. § 1.925, that the Request for Waiver filed by RC Technologies Corporation on April 27, 2007 IS DISMISSED AS MOOT to the extent indicated in footnote 1, *supra*.

26. This action is taken under delegated authority pursuant to Sections 0.131 and 0.331 of the Commission's rules, 47 C.F.R. §§ 0.131, 0.331.

FEDERAL COMMUNICATIONS COMMISSION

Blaise A. Scinto  
Chief, Broadband Division  
Wireless Telecommunications Bureau

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<sup>70</sup> See 47 C.F.R. §§ 1.948, 1.9030.